SciViews-K and Komodo Edit, a new platform-independent GUI/IDE for R
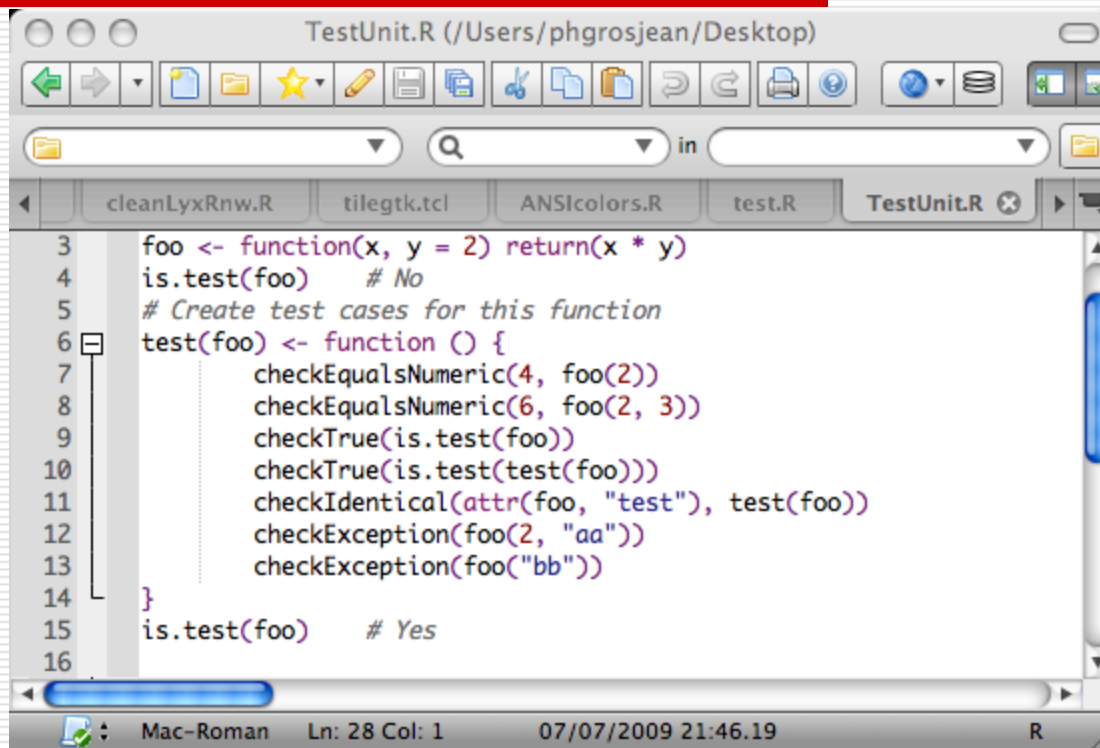Ph. Grosjean, R. François & K. Barton

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What is SciViews?

- SciViews was one of the first GUI for R (back to DSC 2003), with a feature-rich code editor, an R object browser, and integration of R Commander. The old SciViews runs only under Windows and is now replaced by ...

- The new SciViews, aims to provide the combined tools of the old one with Tinn-R features (a widely used R code editor for Windows).

- SciViews-R, a series of R packages to provide functions for the GUI/IDE at the R level: svGUI, svIDE, svSocket, svWidgets, svDialogs, tcltk2, ... (see http://www.sciviews.org/SciViews-R, also usable separately to build other GUIs, e.g., ZooImage).

- SciViews-K, a Komodo Edit plugin adding interaction with R into this Open Source, and platform independent code Editor (see http://www.sciviews.org/SciViews-K).

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Komodo Edit

- Komodo Edit (http://www.activestate.com/komodo_edit/) is a "free and open source multi-language editor that makes writing quality code easy".

- It runs on Windows, Mac OS X & Linux

- It features classical standard and advanced editing fonctions, plus syntax coloring, code folding, projects, emacs bindings, …

- It provides calltips and autocomplete and more…

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SciViews-K

- SciViews-K makes Komodo Edit "R-aware". It also features a series of additions: R object browser, Unit test integration and code snippets for "R beginners" with dialog boxes.

- svSocket is a powerful socket server in CLI mode.

- R is controlled in the background; the R console remains fully functional.

- Concurrent connection of several clients to the same port. Non-blocking computations for the clients.

- You can configure as many ports as you like.

- Fully bidirectional communication and uses asynchronous (no-blocking) communication, both in R and in Komodo (or any other client).

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Unit testing with svUnit

- Unit compatible with Runit, but provides many more features:

  - Attach test to functions or any R objects
  - Automatic detection and execution of tests
  - Automatic construction of test units from loaded objects
  - Easy and flexible integration with R CMD check.

- Extreme programming approach (code the unit test first) and automatic generation of testing reports in Komodo everytime you save your file in 'auto' mode.

SciViews-K, little demo

- …

Thank you for your attention